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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,763	09/15/2003	Norman D. Staller	**BA-0341	1512
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EXAMINER GEBRIEL, SELAM T				
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4178				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/662,763

**Applicant(s)**

STALLER, NORMAN D.

**Examiner**

SELAM T. GEBRIEL

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/ISD)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 12/06/04 & 05/06/04

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 11 is objected to because of the following informalities: Claim 11 can not depend on itself and "Said Flash Unit" lacks antecedent bases.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1 – 10 and 12 – 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Farrington (US 4,941,011).

2. Claim 1, An electronic camera (Figure 1, Element 10), comprising:

An electronic image capture device (Figure 1, Element 32 and 38, "Visible light sensor and Non-visible frequency sensor respectively) adapted for capturing an image scene;

A scanning aperture shutter ("The blade mechanism includes a pair of overlapping shutter blade elements of the scanning type" Col 3, Line 15-18) located to control light energy received by said electronic image capture device from said image scene;

A photocell (Figure 1, Element 32 and Element 28, "Photodetectors") adapted for sensing light energy received from said image scene; and

An exposure control system (Figure 1, Element 48, "Exposure control electronics module) responsive to said photocell and operatively connected to said scanning aperture shutter, wherein said exposure control system is adapted to control said scanning aperture shutter and a flash unit in response to sensed light energy at said photocell to control an amount of fill flash energy received by said electronic image capture system in relation to ambient light energy received by said electronic image capture system during image capture (Abstract and Col 5, Line 65 – 68 to Col 9, Line 1– 48).

3. Claim 2, The camera of claim 1, wherein said exposure control system is adapted to illuminate said flash unit once a predetermined amount of ambient light energy is sensed by said photocell (Col 3, Line 57 - 68 to Col 4, Line 1- 4).

4. Claim 3, The camera of claim 2, wherein said exposure control system is adapted to extinguish said flash unit once a predetermined amount of infrared spectrum energy is sensed by said photocell during flash unit illumination (Col 3, Line 57 - 68 to Col 4, Line 1- 4).

5. Claim 4, The camera of claim 1, wherein said photocell (Figure 1, Element 32 and 28) includes a visible spectrum photocell (A visible light photodetector 30 within a

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visible light sensor, Col 3, ) and an infrared spectrum photocell (An infrared photodetector 26 within a non-visible frequency sensor 28), and further wherein,

Said exposure control system is adapted to use said visible spectrum photocell to sense ambient light energy received from said image scene prior to illumination by said flash unit and to use said infrared photocell for sensing infrared spectrum energy received from said image scene during illumination by said flash unit (Col 3, Line 57 - 68 to Col 4, Line 1- 4).

6. Claim 5, The camera of claim 4, wherein said scanning aperture shutter includes separate apertures for said image capture device, said visible spectrum photocell and said infrared spectrum photocell (Col 3, Line 15—68 to Col 4, Line 1- 4).

7. Claim 6, The camera of claim 1, wherein said exposure control system is adapted to generate control signals for a detachable flash unit (Figure 1, Element 34, Col 4, Line 9 – 13, The reference teaches the camera provided with an electronic flash apparatus together with the apparatus, the word together can be translated in many ways in this case, the flash apparatus can either be a detachable or internally built in the camera) [Col 4, Line 25 -33, for the entire limitation].

8. Claim 7, The camera of claim 1, wherein said flash unit is constructed integrally with said camera (Col 4, Line 9 – 13, The reference teaches the camera provided with an electronic flash apparatus together with the apparatus, the word together can be

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translated in many ways in this case, the flash apparatus can either be a detachable or internally built in the camera).

9. Claim 8, An electronic camera (Figure 1, Element 10), comprising:

An electronic image capture device (Figure 1, Element 32 and 38, "Visible light sensor and Non-visible frequency sensor respectively) adapted for capturing an image scene;

A Scanning aperture shutter ("The blade mechanism includes a pair of overlapping shutter blade elements of the scanning type" Col 3, Line 5-18) located to control light energy received by said image capture device;

A flash unit (Figure 1, Element 34) oriented to illuminate said image scene;

A photocell unit (Figure 1, Element 32 and Element 28, "A visible light photodetector 30 within a visible light sensor 32, and An infrared photodetector 26 within a non-visible frequency sensor 28) adapted for sensing visible spectrum energy and infrared spectrum energy received from said image scene (Col 3, Line 56-68); and

An exposure control system responsive to said photocell unit and operatively connected to said scanning aperture shutter and said flash unit (Col 4, Line 5 – 35),

wherein said exposure control system is adapted to control an amount of fill flash energy received from said image scene in relation to visible ambient light energy received from said image scene during image capture by illuminating said flash unit once a predetermined amount of ambient visible spectrum energy is sensed by said photocell unit and by extinguishing said flash unit once a predetermined amount of

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infrared energy is sensed by said photocell unit (Abstract, Col 5, Line 65 – 68 to Col 9, Line 1– 48).

10. Claim 9, The camera of claim 8, wherein said visible spectrum (Figure 1, Element 32) and infrared spectrum photocells (Figure 1, Element 28) are separate devices.

11. Claim 10, The camera of claim 9, wherein said shutter includes separate, proportionately operable, variable apertures for said image capture device and said photocell unit (Col 3, Line 15—68 to Col 4, Line 1- 4).

12. Claim 12, A method for electronic image capture using a fill flash function, comprising the steps of:

using a scanning aperture shutter to control light energy received by an electronic image capture device (Col 3, Line 15 – 35 );

sensing visible ambient light energy and infrared energy received from an image scene (Col 3, Line 57- 68 to Col 4, Line 1– 4); and

controlling said scanning aperture shutter and a flash unit during image capture in response to said sensing to cause a predetermined ratio of fill flash light energy to ambient light energy to be received by said electronic 10 image capture device including illuminating said flash unit once a predetermined amount of ambient light energy is sensed during image capture (Abstract and Col 5, Line 65 – 68 to Col 9, Line 1– 48).

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13. Claim 13, The method of claim 12, wherein said step of sensing uses an infrared spectrum photocell for sensing infrared energy received from said image scene during illumination by said flash unit (Col 3, Line 57 - 68 to Col 4, Line 1- 4).

14. Claim 14, The method of claim 13, wherein said step of sensing uses a visible light spectrum photocell for sensing ambient light energy received from said image scene before illumination by said flash unit (Col 3, Line 57 - 68 to Col 4, Line 1- 4).

15. Claim 15, The method of claim 12, wherein said scanning aperture shutter includes separate, proportionately operable, variable apertures for image capture and said step of sensing (Col 3, Line 15—68 to Col 4, Line 1- 4).

16. Claim 16, The method of claim 12, wherein said step of controlling includes extinguishing said flash unit once a predetermined amount of infrared spectrum energy is sensed during flash unit illumination (Col 3, Line 57 - 68 to Col 4, Line 1- 4).

### ***Claim Rejections - 35 USC § 103***

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



18. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farrington (4,910,011) in view of Johnson (4,423,936).

19. Claim 11, Farrington discloses the camera having a flash unit.

Farrington does not disclose the flash unit being a quenchable strobe or flash light unit.

However Johnson discloses a quenchable strobe unit (Fig. 1, Element 30).

Therefore it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify Farrington camera with Johnson's camera quenchable strobe unit. The motivation to do this would be by integrating the quenchable strobe unit into the exposure control system, the camera will operate in both flash and proportional fill flash modes thereby substantially increasing the utilization of the lighting units for photographing both indoor and outdoor scenes.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SELAM T. GEBRIEL whose telephone number is (571)270-1652. The examiner can normally be reached on Monday-Thursday 7.30am-5.00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hai Tran can be reached on 571-272-7305. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the

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Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Selam Gebriel  
Saturday, December 08, 2007

/Hai Tran/  
Supervisory Patent Examiner, Art Unit 4178